

RECORD OF DECISION

**Southern Montana Electric Generation and
Transmission Cooperative, Incorporated
Highwood Generating Station**

**USDA, Rural Utilities Service
Montana Department of Environmental Quality**

May 2007

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Environmental Impact Statement Record of Decision

Southern Montana Electric Generation and Transmission Cooperative, Incorporated Highwood Generating Station

USDA, Rural Utilities Service Montana Department of Environmental Quality

I. Summary of the Agencies' Decisions

In accordance with the National Environmental Policy Act (NEPA) and the Montana Environmental Policy Act (MEPA) and applicable agency regulations, the Montana Department of Environmental Quality (DEQ) and the Rural Utilities Service (RUS) have prepared an Environmental Impact Statement (EIS) to assess the potential environmental impacts associated with a proposal from the Southern Montana Electric Generation and Transmission Cooperative, Incorporated (SME) to construct and operate the Highwood Generating Station. SME's proposed action includes the construction and operation of a 250 (net) megawatt (MW), Circulating Fluidized Bed (CFB), coal-fired electric power generating plant, 6 MW of wind generation, and appurtenant facilities at a site near Great Falls, Montana.

The DEQ and RUS must make a variety of permitting and funding decisions regarding SME's proposed action. After considering the purpose and need and an evaluation of reasonable alternatives to the proposed action, potential impacts to the human environment, management constraints, and other associated issues and after reviewing comments on the Draft and Final EIS from concerned citizens, businesses, unions, trade organizations, civic groups, environmental advocacy groups, and other local, state and federal agencies, the agencies have selected the previously identified preferred alternative – the Highwood Generating Station at the Salem site - with agency-specified conditions for their actions.

The proposed action and the alternatives considered are fully described in Chapter 2 of the Final EIS. Additional stipulations resolving potential adverse effects to the Great Falls Portage National Historic Landmark (NHL) are being negotiated in accordance with the National Historic Preservation Act, Section 106 consultation process. Once the

Section 106 consultation process is concluded all negotiated mitigation measures will be integrated in a Memorandum of Agreement (MOA).

The decision being documented in this Record of Decision is that RUS agrees to participate, subject to loan approval, in the funding of the HGS at the Salem site. DEQ's decisions include the approval of SME's air quality permit application and solid waste management license. More details regarding each agency's regulatory authority, rationale for the decisions and compliance with applicable regulations is described in the following sections.

II. Introduction

The Southern Montana Electric Generation and Transmission Cooperative, Incorporated (SME) proposes to build and operate a 250 (net) megawatt (MW), Circulating Fluidized Bed (CFB), coal-fired electric power plant – called the Highwood Generating Station (HGS) – and 6 MW of wind generation at a site near Great Falls, Montana. SME will lose its principal supply of power from the Bonneville Power Administration beginning in part in 2008 and in full in 2011; thus, the purpose and need of the proposal is for SME to replace that power supply with another source of reliable, long-term, affordable electric energy and related services in order to fulfill its obligations to its member rural electric cooperatives.

This document contains the RUS's and DEQ's Record of Decisions (ROD) for the Environmental Impact Statement (EIS) prepared for SME's proposal. The ROD states the agencies' decisions, their rationale for the decisions, and all alternatives considered in reaching the decisions. It also includes a discussion of preferences among alternatives based on relevant factors, and how those factors were balanced by the agencies in reaching the decisions. DEQ's decisions on SME's air quality permit and proposed solid waste license for the HGS are also documented. In accordance with 40 CFR 1501.5, Lead Agencies, including policy directives from the Council on Environmental Quality and to minimize duplication of effort the agencies are jointly preparing the ROD as co-lead agencies. Including both agencies' decisions allows efficient presentation of overall project information, yet clearly defines each agency's responsibilities and rationale for making their decisions.

III. Background

In order to meet the projected electric power deficit, SME formally applied to RUS, an agency that administers the U. S. Department of Agriculture's Rural Development Utilities Programs, in 2004 for a loan guarantee for the construction of an electric generating source, the proposed HGS, and related transmission facilities. The SME loan application covers the financing needs of its five rural electric cooperative members, representing at least 85 percent (213 MW) of the total projected load requirement. Up to 15 percent (37 MW) of the projected load is planned to be financed separately by

Electric City Power of Great Falls, Montana. The aforementioned load allocation differs slightly from that presented in the Final EIS and represents the most current load forecast.

As part of the loan application process and prior to preparing the Draft EIS, SME was required to prepare two studies: an Alternative Evaluation Study and a Site Selection Study (7 CFR 1794.51(c)). In addition, SME prepared a System Load Forecast in 2004, using standard industry methods to forecast its projected load through 2018. These studies were reviewed and approved by RUS, and were posted on the agency's website in October 2004. Their information and analyses were incorporated into the EIS.

SME submitted a draft air quality permit application to DEQ in September 2005 and formally applied for an air quality permit in November 2005. The application was reviewed and a draft preliminary determination (PD) was released for public review and comment on March 30, 2006. Comments on the draft PD resulted in a supplemental PD that was included in the Draft and Final EIS.

A solid waste management license application was submitted to the DEQ in March 2006.

IV. Alternatives Development and Evaluation

A. *ALTERNATIVES DISMISSED FROM DETAILED CONSIDERATION*

A list of the alternatives reviewed prior to this decision follows. The list contains the alternatives evaluated in Chapter 2 of the EIS and eliminated from further study, and the rationale for their elimination. These alternatives were determined not to be reasonable in meeting the purpose and need of the proposal, for the reason(s) stated.

Alternatives Eliminated from Further Study	
Generation Sources	Rationale for Elimination
Power Purchase Agreements	Higher cost and no probable environmental advantage; SME would contribute indirectly to impacts from other generation sources. Transmission constraints are also a limiting factor.
Wind Energy	Incapable of providing approximately 250 MW of base load due to its intermittency.
Solar Energy (photovoltaic and thermal)	Much higher overall cost and inability to serve as base load due to intermittency.
Hydroelectricity	Scarcity of remaining undeveloped hydropower resources in Montana and generally unacceptable environmental impacts.

Alternatives Eliminated from Further Study

Geothermal Energy	Unavailability of sufficient geothermal resources to generate electricity on a commercial scale in Montana.
Biomass	Infeasible due to distance to and uncertainties associated with wood waste supply.
Biogas	Infeasible due to dispersed locations and insufficient quantities of fuel sources in Montana such as digester gas from organic material and landfill gas.
Municipal Solid Waste	Unavailability of municipal solid waste in Montana in sufficient quantities to generate 250 MW plus generally high emissions and other environmental problems such as toxic ash and residues.
Natural Gas Combined Cycle	Price volatility and likelihood of significantly higher future costs as a result of rising demand and limited supplies.
Microturbines	Incapable of providing cost-effective baseload generation, uncertainty in fuel availability.
Pulverized Coal	Somewhat higher emissions of air pollutants and somewhat higher capital cost than CFB.
Integrated Gasification Combined Cycle	Not currently cost-effective and requires further research to achieve an acceptable level of reliability; except for still undemonstrated potential to capture and sequester carbon dioxide, does not demonstrate significant emissions advantages over CFB.
Oil	High prices and price volatility, with prospect for even higher prices and volatility in the foreseeable future.
Nuclear Power	Permitting and construction of nuclear power plants takes considerably longer than for CFB plants and a new plant would face stiff public opposition; also not cost-effective at the scale needed by SME.
Smaller CFB Plant and Renewable Energy Sources	This combination alternative only partially meets the purpose and need of this proposal in the short-term. It would not provide reliable, cost effective, and consistent energy generation for the predicted long-term load; in addition, transmission constraints and impacts were a key factor in this alternative not being viable.

Alternatives Eliminated from Further Study

Combination of Renewable Energy Sources	This combination alternative would not meet the purpose and need of this proposal. It would not provide long-term reliable, cost effective, and consistent energy generation for the predicted load; in addition, transmission constraints and impacts were a key factor in this alternative not being viable.
Facility Locations	
Decker Alternative Coal-Fired Plant Site	More expensive than the Great Falls sites; also has a higher degree of risk associated with environmental permitting and approvals; transmission constraints; subject to water disruption and the lack of available water rights.
Hysham Alternative Coal-Fired Plant Site	More expensive than any of the Great Falls sites; also has a higher degree of risk associated with environmental permitting and approvals and available water supply and water rights; lack of available transmission capacity.
Nelson Creek Alternative Coal-Fired Plant Site	More expensive than any of the Great Falls sites; also has a higher degree of risk associated with environmental permitting and approvals and available water supply and water rights; would require considerable transmission infrastructure.
Great Falls – Sun River Site	Limitations on rail access, proximity to residential areas, water availability, inadequate size.
Great Falls – Manchester Area	Limited road and rail access, proximity to residential areas, water availability, suitable land parcel unavailable.
Great Falls – Malmstrom	Inadequate size, base expansion, proximity to soccer complex, rail access limitations.
Great Falls – Section 36	Landowner unwilling to negotiate sale.
Water Supply & Wastewater	
Importing bottled water at Salem Site	Bottled water would not be cost effective in large quantities for site-wide use for anything other than drinking water.
Drinking water wells drilled onsite	Rejected in part because of the 300-450-foot depth to the water-bearing Madison limestone formation.
Additional river diversion	A water treatment facility would be classified as a public water supply and would be subject to state and county regulations; no environmental advantage over connection to and use of City of Great Falls water system.

Alternatives Eliminated from Further Study	
Directly Discharging Wastewater into the Missouri River	Rejected in favor of discharging into the City of Great Falls' wastewater treatment system on the grounds of environmental benefits and the cost to construct, operate, maintain, and monitor a wastewater treatment facility.
Disposing of Sanitary Wastewater in Septic System	Offers no environmental benefits over SME's proposed connection to and use of the City of Great Falls wastewater treatment.
Appurtenant Facilities	
Alternate Railroad Spur Alignment – Routed south of power plant to abandoned railroad grade	Disadvantages include need for replacing sections of existing, abandoned railroad grade, conversion of privately owned croplands, and routing of coal train traffic through City of Great Falls.
Alternate Railroad Spur Alignment – Routed north of power plant to City of Great Falls along property lines	Difficult and expensive installation due to rougher terrain, greater environmental impacts at crossings of coulees and watercourses, and the higher estimated cost for required bridges or trestles.
Hauling Ash to High Plains Landfill	Greater cost and the need for 10-12 trucks per day carrying ash through City of Great Falls.

B. ALTERNATIVES EVALUATED IN DETAIL

Three alternatives were considered in detail in the Draft and Final EIS: 1) the No Action Alternative; 2) the Proposed Action, a 250-MW CFB, coal-fired power plant - the Highwood Generating Station - and four 1.5-MW wind turbines at the Salem site; and 3) a 250-MW CFB plant and no wind turbines at an alternative site north of Great Falls, called the Industrial Park site (see Attachment 1 for illustration of site locations).

Under the **No Action Alternative**, the HGS would not be constructed or operated at either site to meet the projected 250-MW base load needs of SME. However, it was unreasonable to assume that no alternative source of electricity would be provided for SME customers once the current power purchase agreement with the Bonneville Power Administration begins to expire. Thus, for the sake of this alternative, it was assumed that the need for a reliable energy supply for the SME service area would still be met by some means, most likely the purchase of power from other sources of generation in the West, including those already online and those currently being developed.

Under the **Proposed Action**, the HGS would be built and operated approximately eight miles east of Great Falls. The Salem site is located in Sections 24 and 25, Township 21

North, Range 5 East at about 3,300 feet (1,006 m) above sea level. It is east and north of the intersection of Salem Road and an abandoned railroad bed. In addition, four 1.5-MW wind turbines would be constructed and operated on the property; the turbines are not being funded by RUS, but rather through federally-available Clean Renewable Energy Bonds, or CREBs. Construction of the HGS would take approximately four years and three months (51 months) from ground breaking to commercial operation.

In addition to the HGS and wind turbines, construction of the following facilities and infrastructure would take place in the immediate vicinity: a rail spur, raw water intake at the Morony Reservoir on the Missouri River, a raw water pipeline, two 230 kV transmission lines for generator interconnection (approximately 14 miles total), a new high voltage switchyard, potable and wastewater lines, and access roads. Plant construction would require a maximum 550 workers, and operation would employ approximately 65 permanent workers. The plant would withdraw and use for cooling and other uses up to 3,200 gallons per minute of water from the Missouri River. The HGS would purchase sub-bituminous coal from either the Spring Creek or Decker mines in Montana's Powder River Basin (PRB), or other suitable supply from which comparable PRB coal supplies are produced. Coal consumption is estimated to be 300,000 lb/hr or up to 1,314,000 tons/yr. Coal would be delivered approximately twice a week in 110-car bottom-dump unit trains. Fly ash and bed ash from the coal combustion process would be disposed of onsite in an engineered monofill, lined with clay.

The **Alternative Site at the Industrial Park** is located in the southern half of Section 30, Township 21 North, Range 4 East. It is just east of Highway 87, about $\frac{3}{4}$ mile (1.2 km) north of the Missouri River and $\frac{1}{2}$ mile (0.8 km) east of a mobile home park and a newly-constructed residential subdivision. The City of Great Falls has designated this site as the Central Montana Agricultural and Technology Park, that is, as an industrial park. Construction and operation of the 250-MW, CFB coal-fired power plant at the Industrial Park site would be similar to that described for the Salem site.

There would be differences between the two sites in the length and location of transmission interconnector lines, raw and potable water lines, wastewater lines, and the railroad spur that would require construction and along which unit coal trains would haul coal to the generating station. Operation at this site would require the unit coal trains to travel through the city of Great Falls.

The proposed generating station at the Industrial Park site would include the same equipment and component parts, would be operated identically and would consume the same quantities of raw materials as in the Proposed Action. Disposal of fly and bed ash would not take place onsite at the Industrial Park site, because of the smaller area. Instead, ash would be hauled away for disposal in an approved landfill. Unlike the Salem site, the Industrial Park site would not include four wind turbines due to space constraints.

C. ALTERNATIVES NOT SELECTED AND THE AGENCIES' RATIONALE

The following discussion lists the alternatives documented in the EIS that were not selected as the agencies' preferred alternative. If there is an agency-specific reason for that decision, it is included in a separate paragraph.

1. The No Action Alternative does not meet the proposal's purpose and need. It would distribute and perhaps disperse environmental impacts from electricity generation to meet SME's customer's needs to other locations in the American and Canadian West. The No Action Alternative would expose SME, its members and customers to higher prices by purchasing power on the volatile open electric market.
2. The Industrial Park alternative would meet the proposal's purpose and need and provide similar benefits as the Proposed Action, but it has disadvantages compared to the Salem site. Disadvantages of the site include increases in local rail and truck traffic due to coal delivery through the City of Great Falls and hauling fly ash to the nearby landfill, presenting the potential for increased traffic delays and/or accidents. Its proximity to other industrial and residential sources presents potential challenges in air quality permitting as well as noise. The disposal of the fly ash at the landfill will shorten its life requiring expansion of that facility or development of another facility to meet the solid waste needs for Cascade County. The Industrial Park site also is not large enough to accommodate ancillary wind power development.

D. AGENCIES' PREFERRED ALTERNATIVE

Based on the analyses and conclusions presented in the Final EIS, both agencies, RUS and DEQ, have selected the Proposed Action – Highwood Generating Station at the Salem site – as their preferred alternative.

E. ENVIRONMENTALLY PREFERRED ALTERNATIVES

The identification of an environmentally preferred alternative is required by NEPA (40 CFR 1508.2(b)) and MEPA (17.4.617(9)). The environmentally preferred alternative is that alternative which has the least impact on the physical and biological environment and which best protects, preserves, and enhances historic, cultural, and natural resources. Economic, social, technical, and agency mission factors are not considered in the identification of this alternative. The No Action Alternative best meets this definition. The HGS would not be constructed and there would be no associated impacts under this alternative in the Great Falls area. However, it is possible that adverse environmental effects could be increased in other locations where facilities might need to be modified to supply the power that SME will need for its member customers.

Neither of the two action alternatives can be identified as environmentally preferable over the other except with regards to specific issues. The Industrial Park alternative would result in greater impacts to traffic/transportation, human health and safety, off-site ash disposal, residential noise receptors, and possibly to low income populations versus the Proposed Action. The Industrial Park alternative would also result in greater impacts to the High Plains Landfill because of lack of available space for an on-site ash disposal area. However, the Proposed Action would result in an adverse effect on the Great Falls Portage NHL that would be lessened under the Industrial Park alternative.

V. Public Involvement

A. SCOPING

The RUS published a Notice of Intent (NOI) to conduct a scoping meeting and prepare an EIS in the *Federal Register* on September 24, 2004. The scoping meeting was held on October 13, 2004 in Great Falls, Montana. Notices were also placed in local newspapers, including the *Billings Gazette* and the *Great Falls Tribune*. These newspapers were used throughout the public involvement process of the EIS. The scoping comment period ended November 15, 2004.

In addition to the public scoping meeting, two agency scoping meetings were held - one at DEQ offices in Helena on August 12, 2004, and the other in Great Falls on October 12, 2004. Prior to and at these meetings, RUS provided a brief project description and copies of the Alternative Evaluation Study and Site Selection Study to various invited federal and state agencies. At the conclusion of the scoping process, RUS prepared a scoping report that summarized its scoping process and comments received; the report was posted on the RUS and DEQ websites.

DEQ also conducted an additional scoping meeting to comply with Montana procedures. The DEQ's public scoping meeting was held on April 18, 2005 in Great Falls and the 30-day comment period lasted from April 6 to May 6, 2005. The public was notified of the scoping meeting by advertisements in the local newspapers, via State websites, and through specific invitations. DEQ also issued a report summarizing its scoping process as well as input received. The report was posted on the RUS and DEQ websites.

B. DRAFT ENVIRONMENTAL IMPACT STATEMENT

The Draft EIS was released to the public on June 29, 2006, with an extended comment period ending on August 30, 2006. A public hearing was held in Great Falls on July 27, 2006, and upon request, an additional hearing was held in Havre on August 7. Approximately 150 people attended the Great Falls hearing and approximately 70 individuals presented testimony; approximately 70 people attended the Havre hearing, with about 40 presenting testimony.

Public comment on the Draft EIS included oral testimony at the public hearings and written comment in the form of emails, letters, postcards, and a petition. Over 5,000 individuals commented on the Draft EIS, though most of these consisted of signatures on postcards and petitions. More than 200 comment letters were received by RUS and DEQ. Appendix L of the Final EIS contains a summary of comments and the agencies' responses.

C. FINAL ENVIRONMENTAL IMPACT STATEMENT

The Notice of Availability of the Final EIS was published in the *Federal Register* on February 9, 2007 and in local newspapers. Under MEPA, DEQ does not have a comment period on the Final EIS, while the RUS, pursuant to NEPA, accepted comments on the Final EIS for 30 days. The 30-day comment period was due to conclude on March 12, 2007, but due to an address error the comment period was extended by a week to March 19, 2007. Approximately 550 comment letters and emails were received from the public and agencies; a list of commenters is at Attachment 2. Attachment 3 summarizes the main issues and concerns expressed in letters and emails received from the public and agencies; in some cases similar issues have been grouped or consolidated.

D. TRIBAL CONSULTATION

On January 20, 2006, RUS sent letters to eight tribes in the Montana-Wyoming Tribal Leaders Council informing them of the Proposed Action and EIS process and inviting comment and participation. In addition, identical letters were sent to Tribal Historic Preservation Officers at the Blackfeet Nation, the Chippewa Cree Tribe of the Rocky Boy's Reservation, the Fort Belknap Indian Community, the Northern Cheyenne Tribe, and the Confederated Salish and Kootenai Tribes of the Flathead Reservation. Follow-up telephone calls were made to all tribal entities to ensure the information was received and to answer any specific questions.

By way of these letters and contacts, RUS formally requested consultation with the tribes on SME's proposal. RUS also asked tribal representatives to advise the agency if they had specific concerns regarding either of the proposed locations of the HGS, and in particular, for any information they may have on the possible presence of Traditional Cultural Properties (TCPs) or sacred sites at either of the proposed locations under study.

Two responses were received from tribes to this request for consultation. The Northern Cheyenne Tribe expressed concern about cumulative air quality impacts and asked to receive a copy of the Draft EIS. The Blackfeet Tribal Historic Preservation Office requested a site visit, which was held on March 24, 2006. Two representatives of the Blackfeet Tribal Historic Preservation Office in Browning, MT met with SME and

Montana Rural Development's Native American Coordinator and were given a tour of both alternative sites and an explanation of the Proposed Action.

To date, no TCPs or sacred sites have been identified at either the Salem site or the Industrial Park site.

E. AIR QUALITY PERMIT

Under the Federal Clean Air Act, as amended, and its implementing regulations, the U.S. Environmental Protection Agency (EPA) has delegated the authority to issue air quality permits in Montana to DEQ.

With regard to DEQ's air quality permitting process, SME initially submitted a "Draft Application for Air Quality and Operating Permits" to DEQ's Air Resources Management Bureau (ARMB) on September 2, 2005. The ARMB reviewed the application for completeness and returned a detailed set of application deficiencies to SME, which in turn responded to these, and resubmitted an "Application for Air Quality and Operating Permits" to the ARMB on November 30, 2005. The ARMB determined that the application submitted on November 30, 2005, remained incomplete and sent SME a letter highlighting the information necessary to complete the application. The application was deemed complete on March 8, 2006. The ARMB issued a preliminary determination on March 30, 2006; however, during the public comment period on the preliminary determination, SME notified the ARMB of additional emitting units that were not previously analyzed and permitted under the preliminary determination and are necessary for the construction and operation of the CFB Boiler. SME submitted a complete application for the proposed additional emitting units on May 16, 2006, and the ARMB issued a Supplemental Preliminary Determination for Permit #3423-00 on the Highwood Generating Station on June 30, 2006, coinciding with the date the Draft EIS was formally released to the public. The Supplemental Preliminary Determination was included as an appendix to the Draft EIS. The ARMB's public hearings on the air quality permit also coincided with those public meetings on the Draft EIS – July 27, 2006 in Great Falls and August 7, 2006 in Havre.

As with the Draft EIS, the Supplemental Preliminary Determination on Air Quality Permit #3423-00 was included as an appendix to the Final EIS, which was released to the public in late January 2007.

F. WASTE MANAGEMENT LICENSE

The DEQ licenses waste management facilities under the authority of the Montana Solid Waste Management Act, 75-10-201, *et. seq.*, MCA, and associated rules. The DEQ Solid Waste Program is approved by the EPA for the management of solid waste.

Although exempted from the Solid Waste Management Act in 75-10-214(1)(b), MCA, SME voluntarily chose to license the ash disposal area under the DEQ rules governing waste management. Initial discussions were held on July 26, 2005 between SME and the DEQ. A first draft of the license application materials was received by the DEQ on January 25, 2006. Another meeting was held to discuss the license application details on February 11, 2006. A final license application was received by the DEQ on March 20, 2006. The application was deemed complete on July 26, 2006 when the DEQ received the required zoning certification. Solid waste issues were included in the DEIS. Solid Waste Program staff attended both public hearings on the DEIS and responded to comments for the FEIS.

VI. Comments Received

A. RESPONSES TO SUBSTANTIVE ISSUES RAISED ON THE FEIS

Attachment 3 is a tabular summary of comments received by topic area. Responses to substantive issues of policy, regulation, components of the proposal, if not otherwise addressed in this document, are provided here.

Authority

Numerous comments were received regarding the RUS's authority to provide financial assistance to SME. The Rural Electrification Act of 1936 (RE Act) gives the RUS the authority to extend loans for rural electrification and improving electric service in rural areas. In reviewing the SME's loan application, RUS evaluated and confirmed that the SME proposal would meet the criteria for serving defined rural areas. The proposal does not include financing the City of Great Falls' (Electric City Power) portion of the proposed HGS generating capacity. Almost all new generating facilities, regardless of combustion technology or fuel source, must be planned to accommodate current as well as projected future needs; RUS has evaluated SME's load forecasts and found them to be reasonable. As well, the RE Act and RUS regulations do not preclude a borrower from selling excess capacity to the wholesale market. These sales will decrease as additional capacity is utilized in the SME service area in the out years; the majority of the HGS capacity will serve rural areas, and in accordance with 7 CFR 1710.104, the primary purpose of the loan is to furnish power for RE Act beneficiaries.

Loan applications to RUS for power generation require the prospective borrower to demonstrate that cost-effective energy is not available elsewhere to meet the projected need. RUS is satisfied that the data provided by SME, as summarized on pages 2-3 to 2-5 of the Final EIS, adequately meets this requirement.

Financial Analysis

Numerous comments were received regarding the financial analysis and viability of the proposal, particularly in light of recent capital cost increases and re-evaluation of the project budget and busbar cost of electricity. The evaluation by RUS of a loan application requires both financial analysis and environmental analysis, and the results of each of these analyses obviously factor into the overall determination of loan approval. Pertinent, but limited, financial information is included in the EIS, primarily as it pertains to the analysis of alternatives. This follows 40 CFR §1502.23, in that the detailed cost-benefit analysis can be incorporated by reference, rather than displayed in the EIS. Thus, though detailed, current financial information is necessary to the overall RUS funding decision which has not yet been made and is not part of the ROD, it is not considered necessary to the environmental decision.

Future Carbon Regulation

Possible government regulation of carbon emissions has recently drawn considerable and rapidly increasing attention by the public, policy analysts, electric utilities, and government and elected officials. While acknowledging the growing interest in, and in some cases desire for, swift implementation of some form of carbon regulation at the federal level, the agencies believe that the required political initiative and deliberative process to make such regulation a reality remains some time off in the near future. The actual form of any carbon regulation, e.g., a cap-and-trade system versus a "carbon tax", is yet to be determined, will be the subject of considerable debate and deliberation, and would largely determine the magnitude of any costs and who would bear these costs. Thus the agencies do not believe it is appropriate, or would yield information useful to a decision on the SME proposal, to include additional analyses based on widely varying and speculative projections of potential carbon regulation costs.

Carbon Capture and Sequestration (CCS)

Shortly after release of the Final EIS, SME officials met with the Governor of Montana and committed to studying the technical and economic feasibility of retrofitting the HGS to capture and then sequester its carbon dioxide emissions; such a possibility is still in the conceptual stage. At the present time, carbon dioxide capture and sequestration is not practiced on a significant commercial scale at coal-fired power plants anywhere in the world, although there is growing momentum to develop the technologies to do so, and pilot studies are underway.

As of the date of this ROD, SME has taken the initial steps to investigate the technical and financial feasibility of implementing carbon capture technology at the HGS. Should this technology reach the point where SME intends to pursue its implementation, additional air quality studies and related environmental impact analysis would likely be

necessary, but the extent and nature of such studies is impossible to predict as several variables would determine these requirements, including of course whether SME chooses to again seek federal funding.

In parallel with their review of capture technologies, SME is investigating options for long-term storage of CO₂ that would be produced by HGS. Discussions have been initiated with the Big Sky Carbon Sequestration Partnership (BSCSP), one of the U.S. Department of Energy's (DOE) seven regional partnerships working on carbon sequestration. The BSCSP has completed Phase 1 of their studies, identifying potential carbon sequestration sites throughout Montana and the region. Their investigations show that areas to the north of the proposed HGS site show great potential for storage of CO₂. The BSCSP is now actively seeking partners for Phase 2 and 3 carbon sequestration demonstration projects.

In addition to their work with the BSCSP, SME is also pursuing relationships with industrial partners that are interested in using CO₂ for enhanced oil and gas recovery in the region. SME has stated that it will continue to investigate other opportunities, including terrestrial sequestration, but it appears that geologic sequestration holds the greatest promise for holding the volumes of carbon that could be produced.

Renewable Energy Sources and Conservation

Numerous comments were received regarding the need to pursue renewable energy sources and conservation in meeting the energy needs of the area. The RUS recognizes, in considering the SME proposal, that clean and efficient coal-fired generation is only one part of a total energy strategy. Other programs within the U.S. Department of Agriculture, and some specifically in Rural Development programs (Business and Cooperative Programs), provide funding for renewable energy and energy efficiency proposals.

The 2002 Farm Bill established the Renewable Energy Systems and Energy Efficiency Improvements Program under Title IX, Section 9006. This program currently funds grants and loan guarantees to agricultural producers and rural small business for assistance with purchasing renewable energy systems and making energy efficiency improvements. Section 9006, funded at \$23 million in the FY07 Continuing Resolution, is funded at approximately \$35 million in the FY08 budget request and, in fact, also has support from the President's 2007 Farm Bill proposal, which calls for a funding increase to \$71 million annually beginning in 2008.

The program already is a strong success, having leveraged nearly one billion dollars in investments in its first four years. Section 9006 has invested \$87 million in grants and \$34 million in loan guarantees for over 800 renewable energy and energy efficiency projects in 42 states. When completed, these projects will yield 330+ megawatts of wind power, 170 million gallons annually in biofuels production, millions of dollars in

annual energy savings, and over 1 million tons of annual CO2 reductions. This national program improves the country's energy security, environmental quality and economy, and serves to reduce total demand for energy in rural areas. As discussed and evaluated in the EIS, renewable energy sources were incapable of meeting the proposal's purpose and need.

Water Use, Quality, and Quantity

Much of the information and data provided in the Final EIS on water resources was provided by or the result of permit requirements of pertinent Montana state agencies. Several commented that the characterization of existing water quality of the Missouri River and some tributaries in the study area was inaccurate in that it portrayed these waters as 'unsuitable' for recreational and/or consumptive use. Data used to designate a water body as supporting or not supporting a certain use are described, and designations listed, in the Montana Integrated Water Quality Report, which is published every two years. Descriptions in the Draft and Final EIS were obtained from the 2004 report, as referenced in the EIS at:

(http://www.nris.state.mt.us/wis/tmdlapp/pdf2004/2004_ir_master_documentfinal.pdf).

Such descriptions do not necessarily mean that the water in question is unsafe (at least prior to treatment for drinking, for example) or 'devoid' of any aquatic life. Streams or rivers can be characterized as 'impaired' or unsuitable for certain uses while still maintaining good overall water quality. Analyses of the water requirements of the proposed HGS, and state and federal permitting and/or coordination to allow withdrawals from the Missouri River, are clearly described in the Final EIS. An objection filed by PPL Montana regarding use of the Great Falls water reservation has been resolved and the agreement is being finalized. Therefore, approval of the Point of Diversion application by the City can be completed.

B. CHANGES IN THE FINAL EIS BASED ON COMMENTS RECEIVED

Comments and concerns with potential environmental effects related to the above issues resulted in the following changes from the Draft to the Final EIS. Minor text edits were made throughout most chapters

Chapter 1. The Montana Department of Transportation was added to Section 1.2, Key Agency Roles, Responsibilities, and Decisions. A description was added of public participation during the Draft EIS comment period and a summary of changes made to the Final EIS as a result of this participation. A description of forthcoming opportunities for public participation was updated.

Chapter 2. Additional information was included on Integrated Gasification Combined Cycle (IGCC) technology. Nuclear fission was added to the list of non-renewable alternatives considered but eliminated. Two combinations of energy sources were

added to the list of alternatives considered but eliminated. The explanation of the methodologies used in the site screening and site selection studies was further elaborated. A new section (2.1.7.4) was added which describes four additional sites in the Great Falls area that were considered and rejected during the site selection process. The description of the Proposed Action (Highwood Generating Station at the Salem site) was modified to reflect a shift in the location of the HGS in response to concerns about its potential impact on the Great Falls Portage NHL. Certain conclusions in the impacts comparison matrix (Table 2-14) were modified to reflect changes in the way certain impacts are characterized.

Chapter 3. A number of maps have been modified to reflect the shift in the location of the HGS at the Salem site.

Chapter 4. A number of maps were modified to reflect the shift in the location of the HGS at the Salem site. Various impact ratings were reconsidered and modified as to level of significance, in particular under the topics of Noise and Transportation, where certain impacts have now been rated as significant.

Appendices. Appendix F containing the Draft Biological Assessment (BA) was finalized after the release of the Draft EIS and replaced with the Final Draft BA in the Final EIS. Two new appendices were included in the Final EIS. A draft MOA concerning the Great Falls Portage NHL was attached in Appendix K. As required under NEPA and MEPA, the public's comments on the Draft EIS and the agencies' responses were attached to the Final EIS in Appendix L. The agencies provided responses to the approximate 1400 comments from over 5000 people in 18 categories.

VII. Summary of Environmental Effects

Fourteen resources or areas of concern that could potentially be affected, emerged from the scoping process and agency discussions, or are required to be evaluated by law or regulation. These issues, and the means by which they were evaluated, are summarized on Pages 1-25 to 1-29 of the Final EIS. The following table summarizes the impact conclusions by resource and site. Details on the environmental consequences of implementing the preferred alternative can be found in Chapter 4 of the Final EIS.

Resource/Issue	Salem Site	Industrial Park Site
Soils and Topography	Moderate, short-term impacts due to construction; permanent increase in impermeable surface area; minor, long-term impacts due	Moderate, short-term impacts due to construction; permanent increase in impermeable surface area.

Resource/Issue	Salem Site	Industrial Park Site
	to waste monofill.	
Water Resources	Negligible construction impacts to receiving water quality; minor impacts on Missouri River flows from water withdrawals.	Negligible construction impacts to receiving water quality; minor impacts on Missouri River flows from water withdrawals.
Air Quality	Short-term construction impacts; long-term minor to moderate impacts due to release of criteria pollutants, HAPs, GHGs, visual plume and haze.	Short-term construction impacts; long-term minor to moderate impacts due to release of criteria pollutants, HAPs, GHGs, visual plume and haze. Potential adverse cumulative and local impacts due to proximity to other industries, City of Great Falls, and local residences.
Biological Resources	Minor, short-term construction impacts to terrestrial and aquatic biota, vegetation; minor long-term impact from rail/traffic collisions.	Minor, short-term construction impacts to terrestrial and aquatic biota, vegetation; minor long-term impact from rail/traffic collisions.
Noise	Minor to moderate, short-term construction impacts; minor long-term impact from train traffic, plant operation; significant impacts to NHL.	Minor to moderate, short-term construction impacts; minor long-term impact from train traffic, plant operation; greater number of residential receptors.
Recreation	Negligible to minor impacts.	Negligible to minor impacts.
Cultural Resources/Historic Properties	Adverse effect to NHL; no impact to archeological resources.	No impact to historic properties or archeological resources.
Visual Resources	Significant impact/adverse effect to NHL.	Negligible to minor impact to NHL; moderate impacts in localized area.
Transportation	Short-term, moderate construction impacts.	Short-term, moderate construction impacts; increased accident risk and traffic congestion due to rail crossings in Great Falls and truck transportation of ash.
Farmland and Land Use	Permanent loss of farmland;	Minor, long-term impact on

Resource/Issue	Salem Site	Industrial Park Site
	moderate, long-term impact on land use/property values.	land use/property values.
Waste Management	Minor, medium-term construction impacts; moderate, long-term operation impacts.	Minor, medium-term construction impacts; minor to moderate operation impacts; possible capacity issues with use of GF landfill.
Human Health and Safety	Minor construction-related impacts; minor, long-term operation impacts.	Minor construction-related impacts; increased risk for traffic-related accidents.
Socioeconomics	Minor to moderately beneficial impacts.	Minor to moderately beneficial impacts.
Environmental Justice	No impact.	Minor to moderate, long-term impact on low-income residents.

VIII. Agencies' Decisions and Rationale for the Decisions

Agency decisions must comply with all applicable federal and state air and water quality regulations and other applicable state and federal environmental regulations. However, the authorities and compliance responsibilities of the two agencies are different, as noted here and in Chapter 1 of the Final EIS.

A. *RURAL UTILITIES SERVICE*

1. Decisions

This Record of Decision (ROD) documents findings specific the Proposed Action – the Southern Montana Electric Generation and Transmission Cooperative, Incorporated (SME) proposal to construct and operate the Highwood Generating Station. SME's proposed action includes the construction and operation of a 250 (net) megawatt (MW), Circulating Fluidized Bed (CFB), coal-fired electric power generating plant, 6 MW of wind generation, and appurtenant facilities at a site near Great Falls, Montana.

The RUS has made the following decisions with respect to this proposal:

- Based on an evaluation of the information and impact analyses presented in the Environmental Impact Statement including the evaluation of all alternatives and in consideration of RUS's environmental policies and procedures (7 CFR 1794), I

find that the overall impact analysis and evaluation of reasonable alternatives is consistent with the National Environmental Policy Act (NEPA). The agency selects the Salem site as its preferred alternative. This ROD, subject to conditions, concludes the agency's compliance with NEPA and the agency's environmental policies and procedures.

- A review and analysis of the proposal's justification, associated engineering studies, and preliminary financial information have been reviewed and the agency concurs in the proposal's purpose and need.
- The proposal has a potential to have an adverse effect on the Great Falls Portage National Historic Landmark. Prior to the approval of the expenditure of federal funds, the National Historic Preservation Act (NHPA), Section 106 process must conclude in accordance with 36 CFR Part 800. Ongoing discussions are being conducted with all consulting parties concerning a resolution of adverse effects with the goal of concluding the Section 106 process with the execution of a Memorandum of Agreement (MOA) with the required parties. Once executed, the MOA will be integrated as a condition for the approval of the expenditure of federal funds.

As Administrator of RUS, I hereby agree to the above and consideration of SME's loan application may proceed. I condition this approval on the following actions:

- a. SME will in good faith implement all mitigation measures and recommendations in the Final EIS and Biological Assessment.
- b. SME will continue to participate in good faith as a consulting party in the NHPA, Section 106 process and will implement all measures agreed to by the signatories to the aforementioned Memorandum of Agreement. Said measures are intended to resolve and mitigate adverse effects of the Highwood Generating Station and associated wind turbines on the Great Falls Portage National Historic Landmark. Approval of the expenditure of federal funds is contingent on completion of the Section 106 process.
- c. SME will obtain and comply with all applicable local, State and Federal permits required for the construction and operation of the generating station.

2. Rationale and Compliance with Legal and Policy Mandates

This section explains how the Proposed Action, as modified, satisfies RUS's statutory, regulatory and policy mandates.

a. National Environmental Policy Act

In the Final EIS, RUS has fully considered all reasonable alternatives to the proposed action, and concluded that the preferred alternative, construction and operation of the

HGS at the Salem site, best meets the purpose and need of the proposal. The agency has met the requirements of NEPA and agency policies and procedures for public involvement, and in light of the substantial interest the proposal has generated, has responded to statewide and local requests for information wherever possible. This has included responses to the media, concerned individuals, non-governmental organizations, and other state and federal agencies. Where significant impacts were identified, the Final EIS has included corresponding measures to avoid, minimize or mitigate for these impacts, as described elsewhere in this document; the measures are also listed in Attachment 4. SME will be responsible for implementation of these measures, with the RUS being responsible for oversight and enforcement.

b. Endangered Species Act

Pursuant to Section 7 of the Endangered Species Act, a Biological Assessment (BA) of the Salem and Industrial Park sites was prepared and potential impacts on biological resources at those sites were assessed. The Final Draft BA was submitted for the review and concurrence of the U.S. Fish and Wildlife Service (USFWS) in January 2007. The USFWS identified the only two species that might potentially occur at the Salem site as the Canada lynx and the bald eagle. The analysis in the BA determined that the proposed federal action would have "No Effect" on the Canada lynx and "May Affect, But Is Not Likely to Adversely Affect" the bald eagle. The BA contained recommended measures for avoiding and minimizing adverse effects on the bald eagle. In late February 2007, the USFWS issued its Biological Opinion, in which it informed the RUS that it concurred with the findings of the BA. This concluded the Section 7 consultation process.

c. Federal Aviation Administration (FAA) Requirements

The FAA requires a "notice of proposed construction or alteration" (FAA Form 7460-1) to be filed at least 30 days prior to construction, and "notice of actual construction or alteration" (FAA Form 7460-2) at least 48 hours prior to construction, of tall structures that may interfere with aviation. The Federal Aviation Regulations (FAR) Part 77 also call for timely notification prior to construction to evaluate the need for lights or other measures to assure aviation safety. The proposed HGS stack is greater than 200 ft. in height, so therefore the FAA notices will be required. The notices will be filed and FAA approval received within the prescribed time frames, prior to construction.

d. National Historic Preservation Act

In accordance with the NHPA, Section 106 process, RUS documented its determination or finding in the Draft EIS; the determination was that the HGS at the Salem site would have a potential adverse effect (visual) on a portion of the Great Falls Portage National Historic Landmark (NHL). The NHL marks the approximate delineation of the route taken by the Lewis and Clark Expedition around the great falls of the Missouri River in

1805. The area of the NHL including and adjacent to the Salem site is privately owned as is most of the NHL except for the portion within the City of Great Falls. Other than a small visitors site referred to as the Portage Staging Area, that is located on Salem Road and north of the proposed HGS, the NHL is not specifically marked. A visitors' center managed by the U.S. Forest Service that includes information about the portage route is the Lewis and Clark National Historic Trail Interpretive Center located along the Missouri River in Great Falls and off the NHL.

More general information regarding the NHL is that it is an approximately 1-mile-wide discontinuous corridor that spans from the lower portage camp, located just north of the mouth of Belt Creek and SME's proposal, to the Upper Portage Camp and White Bear Island at the southern outskirts of Great Falls. The area south of Great Falls includes extensive modern development, including a marina, residential housing and a high school under construction. Developments at Malmstrom Air Force Base and within the Great Falls city limits have significantly altered the central 5 miles of the portage route and that section is no longer part of the NHL. The 10-mile-long section extending northeast from Malmstrom and the short portion of the route located southwest of Mount Olivet Cemetery have not been extensively developed and they are the primary historic elements of the NHL. The land use in this portion of the NHL is primarily agriculture and includes farmsteads, gas lines and electric distribution and transmission lines.

In addition to the interagency meetings held with appropriate agencies (invitees included the Montana State Historic Preservation Officer (SHPO) and National Park Service) during the scoping process in August and October, 2004, informal discussions between a cultural resources consultant working for SME were held with the SHPO in August 2005 during a preliminary cultural resources inventory and evaluation being conducted for the Draft EIS. RUS authorized this consultant to initiate consultation with the SHPO in October 2005. In March and June 2006 respectively, RUS informally contacted and informed the Advisory Council on Historic Preservation (ACHP) in Washington, D.C. and National Park Service in Denver, CO and Missoula, MT of the presence of the Great Falls Portage NHL at the Salem Site and the potential for an adverse effect from the proposed undertaking.

Prior to and subsequent to the release of the Draft EIS in late June 2006 (official date as announced by the U.S. Environmental Protection Agency in the *Federal Register* was July 3, 2007; RUS's *Federal Register* notice was dated June 29, 2007) and in accordance with the Section 106 regulations, RUS formally notified the SHPO, National Park Service, and the ACHP of the potential adverse effect on the NHL and also sought input from them for recommendations as to other appropriate consulting parties who may be interested in consulting to resolve the potential adverse effects. Based on recommendations from these parties, RUS notified and invited additional parties to consult on the proposal's effect on the NHL. To date RUS has invited all the parties that were recommended or have expressed an interest in being a consulting party.

RUS formally announced its finding of an adverse effect to the NHL in the Draft EIS. The SHPO agreed with the agency's finding in a letter dated July 6, 2007.

In their comment letters on the Draft EIS, the National Park Service, SHPO, ACHP, and several historic preservation organizations all expressed concerns about the potential adverse effect of the HGS on the integrity of the NHL. These agencies and organizations also tended to believe that because of the size and industrial nature of the HGS, it would be impossible to mitigate the impacts to such an extent as to avoid an adverse effect.

To further the Section 106 consultation process, RUS organized and facilitated a consulting party meeting in Great Falls on October 5, 2006. This meeting was attended by 43 individuals, both consulting parties and observers. Those parties which had been critical of the site selection process and its outcome (i.e. the Salem site), as well as convinced of the unavoidability of impacts to the NHL, continued to question the alternatives analysis and requested that it be revisited with a view toward seeking avoidance of an adverse effect on the NHL by moving the generating station to another location altogether.

As a result of discussions at this meeting, SME agreed to move the footprint of the facility approximately one-half mile south of the initial location. The new location was still within the property they intended to purchase but outside of the NHL boundaries. After consideration of the proposed location of the proposed wind turbines, it was determined that because of space constraints and technical concerns (e.g. the turbines cannot be directly down-wind of the plant because of potential icing of turbines during winter conditions), SME was unable to reconfigure the turbines outside of the NHL boundaries. To further SME's objective of adding renewable energy resources to its power generation portfolio and to meet the requirements of Montana state law, SME proposes to maintain the wind turbine locations (as noted above SME is not requesting financing from RUS for the turbines). This would be desirable because the nearby transmission line interconnections and a proposed substation would readily enable integration of the turbines' intermittent output.

Another outcome of the October consulting party meeting was that some of the consulting parties requested a more thorough examination of other sites in the Great Falls area. Accordingly, RUS and DEQ added a new section in the Final EIS (2.1.8.4 - Great Falls Area Sites) that discussed four additional sites that SME had examined previously in the Great Falls area. Each of these sites had one or more deficiencies that made them infeasible for the proposed action. In addition to documenting the alternative sites in Great Falls initially considered by SME in the Final EIS, RUS announced, pursuant to NEPA, that the Salem site was its preferred alternative for the proposal. The release of the Final EIS was formally announced in the *Federal Register* on February 9, 2007.

Following the October meeting RUS drafted a Memorandum of Agreement (MOA) with a list of proposed on-site and off-site mitigation measures including on-site landscaping and use of earth tones colors for the plant facilities and appropriate lighting, various stipulations for dispute resolution, provisions for amendment/termination, and defined RUS's Section 106 responsibilities. The signatories of right to this MOA would be the RUS, SHPO, ACHP, and the U.S. Forest Service (as the manager of the Lewis and Clark National Historic Trail Interpretive Center – a proposed recipient of a portion of off-site Lewis and Clark Expedition related mitigation measures), and SME. To further and increase public input into the Section 106 process, the draft MOA was included in the Final EIS as Appendix K.

At the request of the consulting parties, RUS organized a second meeting in Great Falls on March 7, 2007. This meeting was attended by 40 individuals, both consulting parties and observers. Discussions and concerns of some of the parties at this meeting again centered on the analysis of alternative sites and the assertion that not all locations had been thoroughly evaluated to avoid adverse effects to the NHL, and the notion that additional information on the NHL, both historic and archeological, was necessary before any discussions of resolving adverse effects could be initiated. To address the question of additional information, the ACHP representative suggested that a NHPA, Section 213 report might be useful; the National Park Service is responsible for preparation of such a report. Also presented at the meeting and in accordance with a commitment made by SME at the October consulting party meeting, a landscape architect presented preliminary plans and designs for vegetative screening of the HGS.

A follow-up conference call was conducted with the consulting parties on March 15, 2007, in which 18 individuals participated. RUS representatives explained the tentative timeline for completing the ROD on the EIS, with completion of the Section 106 process coming at a later date, but prior to the approval of the expenditure of federal funds. Based on differing opinions by some of the consulting parties, it is RUS's opinion that the issuance of the ROD is not defined as the agency's undertaking; the undertaking is the agency's action on the loan application or the approval of the expenditure of federal funds.

During the conference call some of the consulting parties again expressed their desire for the preparation of a Section 213 report. At RUS's urging, it was agreed that this would also need to be initiated and concluded in a timely manner. RUS submitted a letter to the ACHP on March 22, 2007 requesting that they ask the National Park Service to prepare and submit a Section 213 report to all consulting parties. As of this writing, preparation of the Section 213 report is underway, but a projected completion date is unknown. Timely completion of this report now plays a major role in further informing the consulting parties of any outstanding information on the NHL and an analysis by the National Park Service of the potential "significance of [the] historic property, describing the effects of [the] proposed undertaking on the affected property, and recommending

measures to avoid, minimize, or mitigate adverse effects.” It is hopeful that receipt of the report will further the ongoing discussions and assist in the resolution of adverse effects to the NHL and, ultimately, lead to the execution of a MOA and conclusion of the Section 106 process.

As noted above, discussions among the consulting parties are ongoing particularly with regard to the Salem site. RUS believes that there has been a reasonable and good faith effort as well as an adequate and thorough analysis of site alternatives and that the site selection process is complete. It is also RUS’s position that it has enough information in accordance with 36 CFR 800.5, Assessment of Adverse Effects, to take into account and fully consider the adverse effects on the NHL. The remaining actions, in accordance with 36 CFR 800.6, Resolution of Adverse Effects, include discussion of specific facility components and other possible measures to minimize or mitigate the adverse effects to the NHL.

With regard to the Salem site, subsequent to publication of the Final EIS a previous site selection report, Salem Plant Licensing Information, completed in the early 1980’s by the Montana Power Company as part of a Montana Major Facility Siting Act application was brought to the attention of the agency. The location of the proposed Montana Power Company’s coal-fired facility was in the same area as the HGS (Section 24 and 25), demonstrating that based on a statewide siting analysis, independent of the SME proposal, precedent existed for the feasibility of the Salem site for the siting of an electric generating facility.

e. RUS Loan Review

This ROD is not a decision on SME’s loan application and therefore not an approval of the expenditure of federal funds. The ROD concludes the agency’s environmental review process in accordance with the National Environmental Policy Act and agency policies and procedures (7 CFR 1794). The ultimate decision as to loan approval involves not only the conclusions of the environmental review process, but also concurrent financial and engineering analyses. This process includes final review of pertinent and current financial information of SME’s loan application by RUS’s Assistant Administrator’s Loan Committee and the Senior Loan Committee. Issuance of the ROD will allow these reviews to proceed.

B. DEPARTMENT OF ENVIRONMENTAL QUALITY

1. Decisions

a. Air Quality Permit

As Director of DEQ, I hereby approve the Air Quality Permit as analyzed in the Final EIS. The limits in the approved permit are necessary to ensure that all potential sources of air pollutants comply with the Clean Air Act of Montana. The permit, #3423-

00 is available at http://www.deq.mt.gov/AirQuality/ARM_Permits/AirQuality.asp; due to its length, it was not feasible to attach the air quality permit to this ROD. Hardcopies of the permit may be requested from the DEQ point of contact listed at the end of this document. The air quality permit becomes effective when 15 days have elapsed after DEQ issuance of their final decision on permit #3423-00, unless a hearing is requested and a stay of the permit is granted, as described below. Construction must begin within 18 months of issuance of the air quality permit and proceed with due diligence.

b. Solid Waste License

As Director of DEQ, I hereby approve the Solid Waste Management License. SME's application for this license was analyzed in the Final EIS. A copy of the license is included in Attachment 5 of this document.

2. Rationale and Compliance with Legal and Policy Mandates

This section explains how the Proposed Action as modified satisfies DEQ's statutory, regulatory and policy mandates.

a. Montana Air Quality Act

Under the federal Clean Air Act, as amended and implementing regulations, the U.S. EPA has delegated the authority to issue air quality permits in Montana to DEQ.

Permit #3423-00 contains a number of measures that will reduce air pollution from the HGS and protect air quality in Montana. These measures, which include operating procedures, equipment determined to constitute Best Available Control Technology (BACT), monitoring, recordkeeping, and reporting requirements address both criteria pollutants and hazardous air pollutants, including mercury.

In October 2006, SME shifted the proposed footprint of the HGS about one-half mile to the south to respond to concerns about potential impacts on the Great Falls Portage National Historic Landmark. SME ran air quality models once again and submitted the results of the model runs to ARMB in December 2006. There were no major changes in the results, in terms of predicted impacts to local air quality from criteria pollutants.

b. Montana Solid Waste Management Act

Under the Federal Resource Conservation and Recovery Act, as amended and implementing regulations, the EPA has reviewed and approved the Montana DEQ's Solid Waste Program as adequate to regulate solid waste in Montana outside the boundaries of Indian Country. The DEQ Solid Waste Program reviews license applications for compliance with the Montana Solid Waste Management Act and applicable rules, issues licenses, and conducts inspections to insure regulatory compliance. Electrical

generating facilities that dispose of ash on their own property are exempted from the requirements of the Solid Waste Management Act in 75-10-214(1)(b), MCA. SME has voluntarily agreed to be subject to the Montana Solid Waste Management Act, and accompanying rules, and has applied for a license.

The license application submitted in March, 2006 enabled the DEQ to evaluate the proposed ash disposal site design and operation for compliance with the Montana Solid Waste Management Act. The application also included the No Migration Demonstration for the proposed site. The Department's evaluation of all of the submitted documentation allowed for the approval of the application and the facility design.

The landfill design approved by the DEQ includes a liner consisting of two feet of re-compacted native clay subsoils and an evapotranspiration final cover that will be seeded to native plants. Groundwater in the uppermost aquifer, the Kootenai Formation, will be monitored for background concentration levels of common water quality parameters and metals. A monitoring schedule based on the initial sampling will be determined by the DEQ. The No Migration Demonstration submitted with the license application showed that there will be no contamination of the uppermost aquifer during the life of the facility and the thirty year post closure care period, but SME has agreed to monitor water quality in excess of DEQ requirements.

When the location of the proposed landfill was moved in October, 2006, the DEQ reexamined the soil borings in the new landfill area and determined that the analysis of the soil and groundwater conditions were the same as the original proposed location. For more detail please reference License #449 at Attachment 5.

c. MEPA Cumulative Effects Analysis

Chapter 5 of the Final EIS provides cumulative effects analysis. There are no related future actions under concurrent consideration that, when considered in conjunction with past and present actions, are likely to result in additional significant impacts. Should future actions be proposed which have or may have cumulative effects, additional analysis pursuant to applicable requirements of MEPA would be conducted.

d. Regulatory Restrictions on Private Property

Chapter 4 of the Final EIS includes analysis of regulatory restrictions on the use of private property. There are no conditions or stipulations being imposed by DEQ that would restrict the use of private property on which the HGS would be constructed. The air quality permit and solid waste management license are based on SME's respective applications and are therefore not considered to be regulatory restrictions with taking or damaging implications.

IX. Right to Administrative Review (Appeal Processes)

The statutes under which our decisions are documented in this Record of Decisions provide that our decisions may be appealed or challenged as described below.

A. APPEALS OF THE RUS DECISIONS

This Record of Decision concludes the agency's environmental review process pursuant to the National Environmental Policy Act and the agency's environmental policies and procedures (7 CFR 1794). There are no provisions to appeal this decision. Legal challenges to the ROD may be filed in federal district court under the Administrative Procedures Act.

B. APPEALS OF THE DEQ DECISIONS

Notice of the decisions and any permit issuance will be published in The Missoulian (Missoula, Montana), The Daily Inter-Lake (Kalispell, Montana), the Great Falls Tribune (Great Falls, Montana), the Helena Independent Record (Helena, Montana), and the Billings Gazette, (Billings, MT) as well on the Department's web page.

1. Air Quality Permit

The Clean Air Act of Montana provides that any person jointly or severally adversely affected by the final action regarding this Air Quality Permit may request a hearing before the Board of Environmental Review. The request for a hearing must be filed within 15 days after the department renders its decision and shall contain an affidavit setting forth the grounds for the request (MCA 75-2-211(10&11)). Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620.

2. Montana Solid Waste Management License

The Montana Solid Waste Management Act requires that the Local Health Officer validate any solid waste management license within 15 days of the receipt of the license from the DEQ. The Local Health Officer may only refuse to validate the license based on the inability of the applicant to satisfactorily comply with the laws and rules governing waste management. If the Health Officer refuses to validate the license, the applicant and any person aggrieved by the decision not to validate the license may appeal the Health Officer's decision the Board of Environmental Review within 30 days.

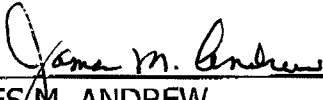
There is no ability for the general public to appeal the decision of the DEQ or the Health Officer to license a facility in the Montana Solid Waste Management Act.

3. Montana Environmental Policy Act

Under 75-1-201(6)(a), a challenge that is based on an alleged failure of DEQ to comply with the Montana Environmental Policy Act must be filed in state district court within 60 days of the decision.

X. Approvals

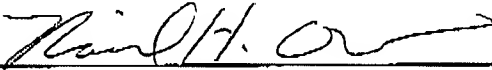
This Record of Decision is effective for each agency's authorized items of approval on signature.



JAMES M. ANDREW
Administrator
Rural Utilities Service

5/10/07

Date



RICHARD H. OPPER
Director
Montana Department of Environmental Quality

5/10/07

Date

Contact Persons

For additional information on this Record of Decision or the Final Environmental Impact Statement, please contact either Richard Fristik, RUS, Project Coordinator, at USDA-RD, Utilities Programs, 1400 Independence Ave., SW, Stop 1571, Washington, DC 20250, or Kathleen Johnson, DEQ Project Coordinator, Director's Office, DEQ, PO Box 200901, Helena, MT 59620-0901.

For specific information on the air quality permit, or to request a hardcopy of the permit, contact Mr. M. Eric Merchant, DEQ, PO Box 200901, Helena, MT 59620-0901 or by phone at (406) 444-1457.

Attachment 1

Location of Site Alternatives

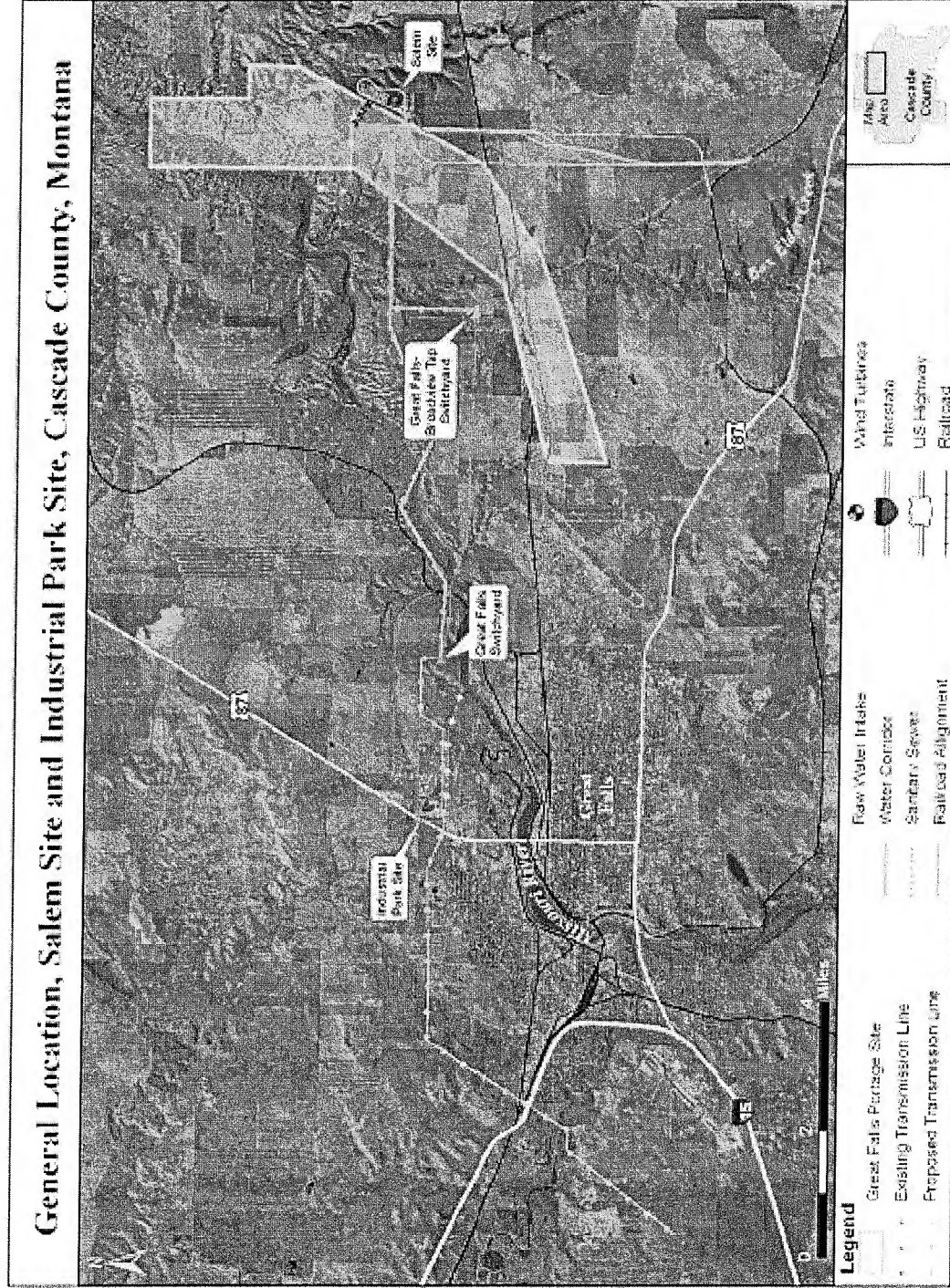


Figure 2-24. Vicinity Map of Highwood Generating Station (Salem and Industrial Park Sites), Great Falls, and Missouri River

Attachment 2

Commenters on Highwood Generating Station Final EIS

Adams, Bob	Adams, Carol	Albertson, Joyce
Allaire, Helene	Allen, Tanya	Allison, Amorette F. (Historic Preservation Officer, Miles City Preservation Office)
Alpha, Tau Rho	Anders, Dorothy	Anderson, Dave
Angove, Clyde J.	Annau, Patricia	Armstrong, Henry L.
Armstrong, Stuart L.	Attardo, Pamela J.	Bagley, John M.
Baiz, Claire	Baiz, Tom	Barmeyer, Susan
Barnes, Glenda L.	Barton, Drake	Barton, Julia
Bason, James	Baumler, Mark (Montana State Historic Preservation Officer)	Bay, Lisa
Beach, Anita L.	Becker, Julia M.	Becker, Mike and Stephanie
Bedker, Gloria and Donald	Bell, Charmayne	Bell, Wallace C.
Benham, Janice	Benner, Carol J.	Bennett, Dan
Bennett, Donna	Bennett, Judith	Bergstein, Diane
Bernard, Joanne	Bertelsen-James, Jan	Biehl, Daniel S.
"Big Sky Gen" [bgskygen@mt.net]	Bisch, Sally Ann	Bishop, Norman A.
Bjornlie, Harvey	Black, Deirdre	Blake, JoAnne
Blank, Dee	Blevins, Auzie	Blevins, Marilyn
Blount, Richard and Arla	Bocock, Charles (Co-Vice Chair, Citizens for Clean Energy)	Boettcher, Robert
Boggs, Denise	Boland, Bill	Boland, Bob
Bolal, Will	Bonnand, Sheila	Boyd, Arleen
Boyle, Doris	Bradshaw, Glenda	Breeden, Janet
Breeden, Laurie	Briden, Clayton	Brown, Claudia S.
Brown, David	Brown, Diane	Brown, Joyce W.
Buckley, Muriel	Buley, Stephanie	Byrne, Kerrie
Campbell, Karen Anne	Campbell, Mary	Caudle, Douglas A.
Caudle, Joanne F.	Chaon, Cheryl	Christensen, Alan
Christensen, Ray and Ann	Christensen, Sandee	Christensen, Yulia
Clare, Kathryn M.	Clark, Carl	Clinkingbeard, James R.
Cloepfil, Leona, D.	Coleman, Helen	Coleman, Robert M.
Collins, Carol I.	Collins, Christeen	Colvin, Susan
Combs, Frances E.	Combs, James H.	Comer, Helen
Conlan, Dorothy M.	Conrad, Gil	Cosgrove, Mary Ann
Coston, John	Courtnage, Sandy	Davidson, Teresa
Davison, Fred E.	Decker, Kenneth	Deligdisch, Andree
Deline, Rich	Denning, Ted	Deutsch, Donna
Dickey, James R.	Dieruf, Carli	Dieruf, Lenore
Dillen, Abigail (Earthjustice)	Dixon, Alex	Dohrman, Richard W.
Dobney, Bruce and Anne	Dolman, Aart	Donner, Judi
Donner, Mike	Donner, Robert M.	Donovan, Barrie
Dow, Nancy	Doyle, Marlene	Driggers, Jaimy
Duncan, Bea	Dunham, Sandra L.	Durham, Rebecca
Durkin, Lynne	Dutchak, Nancy	Dybdal, Jean C.

Eastwood, Donna	Eastwood, Medwin	Ecklund, Richard
Eddy, Sharon and Larry	Eisenberg, Sharon	Eller, Jim
Ellingsen, Valley	Emineth, Mike and Lorna	Englisan, Jay
Enk, Michael	Ericksen, Judy	Evitts, Paula
Ewert, Cena B.	Eyre, Arvin	Faler, Harold L.
Farmer, Joan	Filipoch, Robert J.	Fisher, Carol
Fisher, Joanne	Fisher, Richard	Fix, Mark
Florian, Denton E.	Floyd, Jaybe	Forder, Wayne W
Foster, Maureen	Frederick, Mike	Freiner, Will
Freyholtz, Mert & Vicki	Friskics, Scott	Fry, Arthur
Gaffney, Dolores and Richard	Gallagher, Mia	Garvey, Lydia
Gessaman, Kathleen Z.	Gessaman, Ronald and Karen	Giese, Mark M
Gilleon, Laurie Stevens	Gilleon, R. Tom	Gillimm, Jennifer M.
Gilmore, Lesley M.	Glantz, Peggy	Glover, Laurie
Goldsmith, John and Shirley	Good, Mark	Gorsuch, Lea
Graff, Laura	Gray, Randy	Grayson, Karyl
Greene, James D.	Gregovich, Gayle	Grimland, David
Groeschel, Christa H.	Grove, Dianne	Gupton, Liz
Hammer, Diana	Hamilton, Annie	Hamilton, Mary
Hanewald, Beverly D.	Hankins, Lester L. (Butch) (Citizens for Clean Energy)	Hant, Rebecca L.
Harbine, Jenny (Earthjustice)	Hardiman, Lisa Lotte	Harding, Grace D.
Harding, Warren G.	Harris, Don	Harris, Kent
Harris, Lee D.	Hartwell, Bert	Hasenkrug, Kim J
Hauge, Barb	Hayes, Margaret	Hayman, Denise
Hedges, Anne (Montana Environmental Information Center)	Helding, Arnold	Helvey, Pat
Henderson, Janet	Hermiller, Stacy	Hermiller, Tom & Joann
Hiestand, Kathryn	Hilden, Alan D.	Hill, Beth
Hillstrom, Susan	Hilton, Jeneese	Hollern, Kelly
Holton, George	Holton, Virginia	Hon, Larry
Hood, Barry	Horn, Claud A and Brenda	Horning, Deb
Horning, Ted	Houle, Brad	House, Paul
Huffman, Dan	Huffman, Sandy	Humphrey, James A.
Humphries, Maralon	Hunner, Bruce	Hurdle, Joan
Hurlbut, Kevin	Jackson, Mr. & Mrs. Alvie	James, W. Dudley
Jaynes, Bill	Jennings, Charles D.	Jennings, Doris
Jennings, Gerry	Jetter, Rose A.	Jiusto, Chere (Montana Preservation Alliance)
Jochem, Nancy and Dan	Johnsen, Joan	Johnson, Janice
Johnson, Vicky and Jerry L.	Jokerst, Gail	Jones, Dixie
Jones, Jim	Jones, Marilyn	Judge, Pat, et al. (Montana Environmental Information Center)
Kadoshnikov, Svetlana	Kahn, Chris	Kantola, Joseph and Myrna
Kauffman, Warren J.	Kelley, Amy	Kelly, Sheila
Kirk, Roger	Knaphus, Kristopher and Kathleen	Krauss, Kirsten
Kreisberg, Michael	Krischel, David	Kuhn, Carol
LaCasse, Craig M.	LaMotte, Betty	LaMotte, Jeff

LaMotte, Jennifer	Lane, Arlice	Langevin, Connie
Langstaff, John	Larson, Jim	Lassila, Daryl
Lassila, Earlyne	Lassila, Linda	Lassila, Robert
Lee, Beverly J.	Leppich, Ken	Lewin, Stuart
Ransdell-Lewin, Hilary		
Lewis, Kathryn	Linden, Gudrun	Linn, Amanda
Lloyd, Kathy	Liebert, Richard (Chair, Citizens for Clean Energy)	Littlepage, Dean
Long, Linda (President, Upper Missouri Breaks Audubon Society)	Lucas, Shirley A.	Luckett, Michael
Luckman, Greg	Lyden, Sally	Lynn, Gerald P.
Mader, Bernadette	Mader, Janet	Mader, Leo
Mader, Mike	Mader, Millie	Mader, Scott
Madson, Gregory and Christian	Magley, Becky	Maillet, Jacqueline
Makich, Kathleen O.	Makich, Max A.	Maloney, David
Maloney, Marjorie	Mantzey, Mel	Marble, Harriet
Marshall, Jessica	Martello, Tracy	Martens, Piet
Martin, Dave	Martin, David	Martin, Jenny
Martin, William & Robin	Mason, Julie Hedstrom	Mathsen, Ronald M.
Matthews, Aaron	Maurer, Larry & Carol	Maxwell, John C.
May, Kendall	May, Mary E.	May, Michael R.
Mayernik, Sandy	Mayernik, Stan	Mayernik, Stephen V.
McCabe, George N.	McClellan, Marjie J.	McClelland, Riley and Pat
McComas, Donald E.	McComas, Sharlene S.	McGuffin, Sandy
McNight, Ed	McNeil, Laine	McRae, Douglas S.
Mehmke, Robyn and Walter	Mercer, Colleen	Mest, John and Eleanor
Mike [no last name provided], 232 Salem Road, Great Falls	Milkovich, David	Milkovich, Joan
Miller, Chris	Miller, Kathryn A.	Miller, Neal
Mills, Alice	Miranti, Elsie	Moe, Duane N.
Monheim, Jeff	Monheim, Jolene	Morris, Pamela June
Morrison, Nick	Murphy, Shirley	Murphy, Tanya E.
Musil, Mary A.	Musser, Linda and Bill	Narbaitz, Marvin
Nelson, Bernard Cal	Nelson, Kathleen F.	Newman, Joe
Nick [5 years old; no last name given]	Nobles, E. Terrill	Norgaard, Roger
Nottingham, L. Jack	O'Brien, Mary	O'Dell, Charline
O'Neill, Jeanne E.	O'Neill, Laura	Onushco, Andy
Oset, Robert	Osweiler, Larry E.	Osweiler, Nicole K.
Palmer, Jeff	Parker, Louise M.	Parkinson, Audrey Parkinson, Robert
Parson, Donald L.	Pasek, Heidi	Pasek, Scott
Paulick, Ron	Paulsen, Jim	Pauly, Sandra
Pettit, Bill	Pettit, Bob	Pettit, Marie
Phillips, Harold Wayne	Pigeon, Gail	Plouzek, Morlene
Pizzonia, Domenico	Poole, Deb	Potts, Stephen (NEPA coordinator, EPA Region 8)
Pritting, Eileen	Provance, Christine	Pugh, Dale R.
Quint, Mary	Rachlis, Sandra	Ralph, Kathleen
Raynes, William M.	Raynes, Virginia R.	Ream, Catherine

Redmond, Carmen D.	Reichert, Arlyne	Reichert, Cheryl
Rezentes, Lawrence C. (Citizens for Clean Energy)	Richards, Paul	Ritland, Carol Ann
Rivers, Janet and David	Roberts, Richard E.	Robinson, Kirk
Romenesko, Jim	Root, James C.	Rosenleaf, Patricia A.
Ruffini, Ryan	Russell, Todd T.	"rvfarms@sofast.net"
Salmonson, Jon	Salsbery, Denny "Wildman"	Schlepp, Judith
Schmidt, Louis	Schmit, Deb	Schneider, Ann
Schneider, Marilyn F.	Schrader, Ron	Schroeter, Franklin E
Schumacher, Joan	Schure, Linda Holding	Schurew, S. Robert
Sentovich, Lennora	Sentz, Gene & Linda	Severns, Jack
Shaw, Suzanne L	Seymour, Joseph D.	Shafer, Patricia
Shauer, Jo	Sherman, Roger	Shipek, Sharon
Shoup, Heather	Siebel, Gonnine	Siebenaler, Darlene J.
Sievert, Kenneth	Simanek, David	Sire, Wendy Shelton
Skari, Arlo & Darlene	Skinner, Jim (Manager, Program & Policy Analysis Section, MDT)	Smiley, Joan
Smiley, Lloyd W.	Smith, Donald (Chair, Clark Resource Council)	Smith, Jennifer
Smith, Jewell	Smith, Jude	Smith, Prudence H.
Smith, Steven C.	Sommer, Josh	Sorensen, Debbie
Sperry, Janet	Springstead, William	Staffanson, Robert
Staigmiller, Judy	Stebbins, Dona (Mayor, City of Great Falls)	Stevens, David R. and Nike G.
Stevens, Hope	Stevens, Robert T. Jr.	Stewart, Barbara H.
Stimac, Olaf, Jr.	Sullins, Shannon	Swartz, Gary
Swartz, Shari L.	Swearingen, Jennifer	Swearingen, Will
Sweet, Bill	Tacke, Bill J.	Talcott, Diana
Tamang, Carol	Takenaka, Harry J.	Taylor, Elaine E.
Taylor, Neil (Citizens for Clean Energy)	Taylor, Susan A.	Teberg, Barbara
Teter, Darrell W.	"t h" [tiny_monkeys_12@yahoo.com]	Thomas, David E.
Thomas, Deb (Clark Resource Council)	Thomas, Katy	Thompson, Gordon
Thorson, Garri J.	Thornton, Ken (Citizens for Clean Energy)	Tighe, Dennis
Tippetts, Julie	Tischendorf, Jay	Toldness, M.A.
Tonkovich, Jeanne M.	Toubman, Sara	Travis, Lee
Treis, Bruce	Trolinger, Charlotte	Trunkle, Theresa
Trunkle, Thom	Urquhart, Duane and Mary	Vaccaro, Larry
Van Alstyne, Jay	Van Alstyne, Jill	Van Alstyne, Mark
Van Alstyne, Ted	Van Hyning, Dyrck	Van Stratten, Mimi
Van Stratten, Wilbert	Veen, Marva	Veen, Marvin
Vincent, Virginia	Vogt, Martha	Wade, Valerie
Walker, Jeff	Ward, LaLonnie	Wardell, John F. (Director, Montana Office, EPA Region 8)
Waring, Suzanne and Leonard	Warneke, David	Warneke, Lawrence
Warren, Bonnie	Waters, John	Waters-Barcomb, Julie
Weaver, Noel	Welles, Jo	Wendt, Doug

Wenzek, Cliff	Wepprecht, Brent	Whirry, Gordon and Janet
Willett, Frank	Wilson, Bill & Barb	Wilson-Pant, Calanthe
Wingfield, Polly P.	Wiren, Ruth	Wodder, Rebecca R.
Wolf, Mimi and Gary	Wombs, James	Wood, Doris W.
Wood, Wilbur	Yourstarshining, Kaye Guerin	Zackheim, Hugh
Zadra, Marianne	Zion, Candi	

ATTACHMENT 3

Issues and concerns raised in the Final EIS comment letters and emails

Issue/Concern	Number of letters/emails mentioning this issue
HGS would contribute to greenhouse gas emissions/global warming; SME needs to prove ability to capture and sequester carbon dioxide	222
Invest in clean, renewable energy and/or conservation alternatives instead	204
HGS would worsen air pollution (generally)	137
Mercury/toxic pollution	120
HGS uses outdated, inefficient CFB technology and "dirty" coal	113
Adverse impacts to Great Falls Portage NHL	110
Final EIS inadequate, flawed, incomplete, vague, biased/Supplemental EIS needed	107
HGS would needlessly waste scarce water resources (i.e. Missouri River flows)	102
Escalating costs of HGS/financial liability/vulnerability of single electricity source	97
HGS would contaminate nearby prime farmland & threaten organic farming	80
Need for amount of power HGS would provide is unproven/exaggerated	60
Violates right to "clean and healthful environment" in Montana Constitution	48
No meaningful analysis of other reasonable alternatives ever conducted, therefore Final EIS is "arbitrary and capricious"	51
Air pollutants would impair Montana's Big Sky and vistas in outstanding wilderness areas like Bob Marshall	43
Final EIS overrates HGS economic benefits of job creation, etc.; downplays adverse socioeconomic impacts	40
Not given the chance to vote/local government betrayed public	36
HGS would benefit urban more than rural residents, against RUS legal mandate	34
HGS would despoil Great Falls and Montana's environment, natural beauty & image	34
Disproportionate impact on vulnerable populations downwind	30
Most HGS power will be exported, i.e. it's merchant plant in disguise	24
HGS would not serve 120,000 Montanans, as SME claims, but much fewer	20
The EIS process is intimidating and discouraging for citizens, citizens shut out of process, no vote, inadequate	19

information/notification	
Water pollution (general)	19
Adverse effects not properly characterized (property values, wind turbines, noise, wildlife)	16
Cumulative effects analysis of Final EIS was weak and inadequate	15
Specific air quality concerns, e.g., acid rain, permit considerations, monitoring, modeling/analytical approach, coal trains	13
SME power plant should be built closer to coal mines or where electricity will be used	12
If coal must be used, choose IGCC technology	12
Specific water issues, e.g., misrepresentation of water quality status of local receiving waters, permit concerns, water quantity	11
SME inexperience constructing and operating power plants	10
SME's business plan needs to be made available to the public	10
HGS another example of Montana's citizens/environment exploited by outside interests	10
HGW would stimulate economic development and produce benefits like job creation, tax revenue, cost-based electric rates	9
Solutions to projected traffic congestion needed before project approval; inadequate analysis of transportation & traffic impacts	6
HGS is anti-agriculture, EIS authors have no agriculture expertise	5
Radiation releases	4
IGCC analysis in EIS is out-of-date and biased	4
HGS uses advanced technology	3
Project would benefit Montanans with Montana resources	3
Responses to Comments appendix of Final EIS undercounted opponents of HGS and over-counted supporters	3
Industrial park site is superior	2
Health and environmental concerns of HGS opponents are exaggerated	2
Global warming not a concern, cannot wait for carbon capture technology	2
Pollution controls/regulatory program would adequately protect air quality	1
HGS would diversify energy supply	1
Industrial Park site inferior	1
Final EIS investigation, analysis, and conclusions are thorough	1
DEQ not adequately protecting Montana's environment	1
Local ownership of power generation that HGS would provide is important	1
HGS would reduce our dependence on imported fossil fuels from hostile nations	1
Support HGS and renewable alternatives as they become available	1
SME's customers are not entitled to power below market prices	1
RUS violated NEPA regulations by allowing SME to prepare Alternative Evaluation Study and Site Selection study outside NEPA process	1

ATTACHMENT 4

MITIGATION MEASURES IDENTIFIED IN FEIS

HIGHWOOD GENERATING STATION SUMMARY OF MITIGATION MEASURES

The compliance with the terms and conditions of applicable permits, extensive use of best management practices (BMPs) would avoid or minimize impacts during all construction activities. Design measures or standard operating procedures would avoid or minimize impacts during operation. The measures summarized here are those additional measures identified to mitigate or compensate for impacts that may occur during construction or operation of the HGS. Those resource areas not listed did not have mitigation identified.

SOILS, TOPOGRAPHY, AND GEOLOGY

To minimize erosion and stabilize soils, all areas disturbed during construction would be stabilized, graded, and re-vegetated with appropriate grasses and forbs (using seeds) as soon as possible afterwards. Compacted soils may require ripping to mitigate the effects of compaction and allow roots to properly penetrate, develop, and obtain oxygen, moisture and nutrients; in addition, mulching and/or fertilizer may be needed to encourage initial plant growth.

WATER RESOURCES

Depending on permitting requirements, construction activities in or adjacent to the Missouri River may be limited to times when spawning, nesting, or breeding of aquatic and/or wetland species is not occurring. Additionally, during plant operations at the Salem site, groundwater would be voluntarily monitored in the vicinity of the waste monofill in order to detect any possible contamination.

AIR QUALITY

- The investigation underway on the technical and economic feasibility of carbon capture and sequestration from the HGS was described in Section VI of this ROD. SME and the City of Great Falls will explore various other means of offsetting carbon emissions from the HGS and SME's overall energy portfolio:

- SME customers may currently purchase “green” power (other than hydropower), such as wind, solar power and geothermal heat; the increased cost for this option has found most customers reluctant to utilize green power.
- SME has asserted that it would continue to purchase up to 20 MW of hydropower from WAPA as allowed, which equates to 194,416 tons per year of CO₂ emissions avoided, based on less efficient Montana coal-fired boilers.
- The planned 6 MW of wind power at the HGS site would equate to 23,330 tons per year of CO₂ emissions based on less efficient Montana coal-fired boilers.
- SME and the City of Great Falls have applied for a one million dollar grant, through the Montana congressional delegation, to help study greenhouse gas (GHG) mitigation options and develop a GHG mitigation strategy for HGS.
- SME would continue to promote use of geothermal heat pumps, with planned incentives, to its member coops; a total of 425 geothermal heat pumps are currently in service in the SME service area. Each geothermal heat pump avoids approximately 3.62 tons of CO₂ emissions per year.

BIOLOGICAL RESOURCES

Threatened and Endangered Species

The Montana Bald Eagle Management Plan places limitations on the conduct of construction activities. If construction operations occur within the vicinity of an active bald eagle nest, roost site, or seasonal concentration area, temporal and spatial restrictions as outlined on p. 4-68 of the FEIS would apply.

State Species of Concern

If shrub, tree or wetland habitats must be removed, disturbed, or altered for construction or maintenance of the proposed project or infrastructure, a pre-construction reconnaissance could be conducted to determine, to the extent practicable, the relative importance of such habitats to state species of concern. Disturbance of any such sites/habitats of importance to these species groups could be mitigated through the use of reasonable timing constraints during construction, reclamation/restoration of disturbed sites, or other appropriate measures.

Wind Turbines

In designing the turbines, U.S Fish and Wildlife Service (2003) guidelines on minimizing impacts to wildlife from wind turbine generators would be followed. These include features to minimize perching opportunities and collision risk, minimize night lighting

while meeting FAA requirements, and protocols to monitor bird and bat mortalities. If after three years, monitoring demonstrates that bird and bat mortalities are not substantial, monitoring may be ended or modified in consultation with the appropriate regulatory agencies.

Wetlands

Based on National Wetlands Inventory (NWI) maps, approximately five non-jurisdictional wetlands, totaling about 4.6 acres, are located within the proposed plant site. Prior to any construction activities, these wetlands would be field-verified by a Certified Wetland Scientist (CWS), and based on recommendations of the CWS, in-kind replacement for any losses would be accomplished in the immediate vicinity.

Carrion Removal from Railroad Spur and Access Roads

SME will monitor all established roads, as well as the railroad, within 1.0 mile of the wind turbines a minimum of once every two weeks, and will remove all carrion that are equal to or larger than a rabbit in size to a disposal site at least one mile from the turbines.

Noxious Weeds

SME would follow the requirements identified in the Cascade County Weed and Mosquito Management District's document, "Weed Management and Revegetation Requirements for Disturbed Areas in Cascade County, Montana." This document specifies the actions that need to be taken prior to disturbance, during operation, and upon reclamation, to prevent the spread of noxious weeds in the county.

RECREATION

At the Salem site, during construction, SME would attempt to accommodate ongoing access by motorists and visitors to the Lewis and Clark portage route staging area historic site on Salem road north of the HGS and the Great Falls Portage National Historic Landmark more generally.

CULTURAL RESOURCES/HISTORIC PROPERTIES

A cultural resources monitoring program would be established for all preparation, staging, and construction phases of the project. Similarly, an emergency discovery plan would be developed prior to commencing construction. Such a plan would address protocols and procedures for dealing with the inadvertent discovery of archaeological or buried human remains. The development of such a plan would be conducted in consultation with the Montana SHPO and interested Tribal representatives, and contact persons for the SHPO and tribes will be identified.

Consultation under the Section 106 process is ongoing to resolve an adverse effect to the Great Falls Portage National Historic Landmark (NHL) and will conclude prior to the approval of the expenditure of federal funds. Proposed mitigation measures under Section 106 process are discussed elsewhere in this ROD, and would be finalized in a fully executed MOA.

The following list of proposed measures is under active consideration by SME, RUS, SHPO, ACHP and the other consulting parties.

On-Site Avoidance, Minimization, and Mitigation

SME would agree to perform all of the following measures, subject to a reasonable cap on expenditures that is the subject of the MOA attached to this EIS:

- Shift the footprint of the SME HGS outside of the NHL's designated boundaries. The wind turbines and certain aspects of HGS infrastructure may still cross NHL boundaries.
- Maximize the use of downward directional lighting where appropriate and safety measures allow.
- Where feasible use of earth tone colors on facilities.
- Continue to evaluate the feasibility of utilize landscaping around the facility.
- Construct HGS infrastructure using materials and techniques to lessen visual impacts, such as self-weathering (Corten) steel transmission poles, burying pipelines and re-vegetating the disturbed area, and constructing new access roads in a manner similar to existing roads.

Off-Site Mitigation

SME would agree to fund one or more of the following projects, as agreed to by the consulting parties, up to a reasonable cap on expenditures that is the subject of the MOA:

- Assist in funding the acquisition of the property surrounding the staging area location and plant or allow the property to revert back to native vegetation. This will give visitors a sense of the conditions or setting present during the time of the portage.
- Assist in funding the acquisition of available properties (directly across from the Center and the former Wilhelm house) across the Missouri River from the Lewis and Clark Interpretative Center to create and preserve in perpetuity a more natural unencumbered landscape for an increased visitor experience.
- Assist in funding (amount to be determined) the renovation of the Lewis and Clark Interpretative Center library and Lewis and Clark Trail Heritage Foundation Headquarters located in the Interpretative Center.

- Assist in and set up an annual contribution to assist in furthering and maintaining educational programs related to or part of the Interpretative Center's activities.
- Provide in-kind energy services to the L & C Interpretive Center if they can be accepted.

TRANSPORTATION

SME would cooperate with MDT, BNSF Railway, and county transportation officials on planning and construction of a separated grade crossing of S-228 and the proposed rail spur to the HGS. Additionally, in consultation with MDT, SME would prepare a traffic mitigation plan prior to construction. This plan would address specific measures for improvements or other actions to reduce congestion and protect motorists' safety at several key intersections along the commuting route between Great Falls and the Salem site – namely US 87/98 and S-228, S-228 and Salem Road, and 10th Avenue South and 57th Street. Any damage to road surfaces from heavy equipment movement would also be repaired promptly.

WASTE MANAGEMENT

Mitigation measures would include entering into and establishing a binding voluntary agreement with DEQ for the licensing and regulation of any onsite waste disposal at the Salem site. This agreement would include the installation of a groundwater monitoring system and management of the monofill ash disposal site in accordance with DEQ rules. Recycling opportunities will be sought for construction debris and, if feasible, coal combustion products.

ATTACHMENT 5

SOLID WASTE LICENSE # 449

STATE OF MONTANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Solid Waste Licensing Program

LICENSE TO OPERATE A SOLID WASTE MANAGEMENT SYSTEM

LICENSE NUMBER: **449**

DATE: **May 10, 2007**

NAME OF FACILITY: **Highwood Generating Station Class II Landfill**

This license authorizes the licensee to operate a Class II facility on **One hundred (100) acres** in Sec. 24, T. 24 N., R. 5 E., M.P.M., Cascade County, Montana. The facility is located on private land. The general location is approximately 6 miles northeast of Malmstrom Air Force Base in Great Falls, MT.

SIZE BY TONNAGE OR TYPE: **Major (annually accepts more than 25,000 tons, but not more than 200,000 tons)**

Short description of system: An industrial landfill facility that manages Group II solid waste, specifically coal combustion byproducts including fly ash, bed ash, and byproducts from the water treatment system, from the Highwood Electrical Generating Station.

LICENSEE:

**Southern Montana Electric Generation
and Transmission Cooperative, Inc.**
3521 Gabel Road, Suite 5
Billings, MT 59102

LANDOWNER:

**Southern Montana Electric Generation
and Transmission Cooperative, Inc.**
3521 Gabel Road, Suite 5
Billings, MT 59102

SITE CLASSIFICATION: **CLASS II LANDFILL**

This license is conditioned on the construction and management of the system as approved by the Department and on specific conditions imposed below. The licensee should be aware that its failure to comply with applicable law or rule, in particular Title 75, chapter 10, parts 1 and 2, Montana Code Annotated, and Administrative Rules of Montana Title 17, chapter 50, sub-chapters 4, 5, and 7, including the payment of applicable fees, may result in enforcement actions or license revocation or denial of an application for annual renewal.

CONDITIONS OF LICENSE: **See attached specific license conditions and map of licensed boundary**

/ S /

HEALTH OFFICER

(License must be validated before it is effective.)

RICHARD OPPER, DIRECTOR

Department of Environmental Quality

ATTACHMENT

SOLID WASTE LICENSE NO. 449

HIGHWOOD GENERATING STATION CLASS II LANDFILL

SPECIFIC LICENSE CONDITIONS

- (1) Only for Coal Combustion Byproducts including fly ash, bed ash, and byproducts from the water treatment system, produced at the Highwood Generating Station.
- (2) Waste management units must be located outside the boundary of the Great Falls Portage National Historic Landmark.

Highwood Generating Station Class II Landfill Facility Location Map And Site Layout Map

